



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Lee Hammen, Mill Manager
Ahlstrom-Munksjö NA Specialty Solutions, LLC
600 Thilmany Road
Kaukauna, Wisconsin

Re: Notice and Finding of Violation
Ahlstrom-Munksjö NA Specialty Solutions, LLC
Kaukauna, Wisconsin

Dear Mr. Hammen:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Ahlstrom-Munksjö NA Specialty Solutions, LLC (you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (a)(3). We find that you have violated the Wisconsin State Implementation Plan and your Title V operating permit at your Kaukauna, Wisconsin facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Victoria Nelson. You may call her at (312) 886-9481 or email her at nelson.victoria@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

**SARAH
MARSHALL**

Digitally signed by
SARAH MARSHALL
Date: 2020.12.08
15:42:47 -06'00'

Sarah Marshall
Section Chief
Air Enforcement and Compliance Assurance Section (MI/WI)

Enclosure

cc: Mark Nessman, HSE Manager, Ahlstrom-Munksjö NA Specialty Solutions, LLC;
Maria Hill, Chief, Wisconsin Department of Natural Resources

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

Ahlstrom-Munksjö NA Specialty Solutions,
LLC
Kaukauna, Wisconsin

Proceedings Pursuant to
Section 113(a)(1) and (a)(3) of the
Clean Air Act, 42 U.S.C.
§ 7413(a)(1) and (a)(3)

**NOTICE AND FINDING OF
VIOLATION**

EPA-5-20-WI-01

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice and Finding of Violation under Section 113(a)(1) and (a)(3) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(1) and (a)(3). EPA finds that at its facility at 600 Thilmany Road, Kaukauna, Wisconsin (Facility), Ahlstrom-Munksjö NA Specialty Solutions, LLC (Ahlstrom) is in violation of the Wisconsin State Implementation Plan (SIP), as follows:

Statutory and Regulatory Background

1. The Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. *See* Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

National Ambient Air Quality Standards

2. Pursuant to Sections 108 and 109 of the Act, 42 U.S.C. §§ 7408 and 7409, on June 22, 2010, EPA revised the primary National Ambient Air Quality Standards (NAAQS) for sulfur dioxide (SO₂) to provide increased protection of public health with an adequate margin of safety; especially for children, the elderly and those with asthma. *See* 75 Fed. Reg. 35520 (2010).
3. The revised national primary ambient air quality standard for SO₂ is 75 parts per billion (ppb) (196 µg/m³) based on a 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour concentrations. *See* 40 C.F.R. § 50.17.

Wisconsin SIP

4. On various dates, EPA approved Wisconsin Administrative Code, Natural Resources (NR) 400.02 as part of the federally enforceable State Implementation Plan (SIP) for Wisconsin.

5. At NR 400.02(55), the Wisconsin SIP states that a *direct source* means “any stationary source which may directly result in the emission of any air contaminant at a fixed location.”
6. At NR 400.02(105), the Wisconsin SIP states that a *new direct or portable source* means “a direct or portable source, the construction or modification of which is commenced after April 1, 1972, or the effective date of promulgation of an emission limit which applies.”
7. On May 21, 1993, EPA approved Wisconsin Administrative Code, NR 417.07 as part of the Wisconsin SIP. *See 58 Fed. Reg. 29537.*
8. Wisconsin Administrative Code, NR 417.07, Statewide Sulfur Dioxide Emission Limitations includes the following subsections: 1 (Applicability); 2a, 2b, 2c, 2d, 2g (Emission Limits for Existing Sources); 3 (Emission Limits for New Sources); 4 (More Restrictive Emission Limits); 5 (Alternate Emission Limits); 6 (Compliance Schedules); 7 (Compliance Determinations); 8 (Variance from Emission Limits); as published in the (Wisconsin) Register, September, 1990, Number 417 at page 86, effective October 1, 1986.
9. At NR 417.07(2), the Wisconsin SIP provides sulfur dioxide emission limits for existing sources, and requires that “except as provided under subsection (5) or (8), no person may cause, allow or permit sulfur dioxide to be emitted from any direct source constructed on or before February 1, 1985, in amounts greater than those specified in this subsection.”
10. At NR 417.07(2)(a), the Wisconsin SIP require that “all steam generating units and other fuel burning equipment firing solid fossil fuel, alone or in combination with fuel burning equipment firing other fuels, at a facility which has a total heat input capacity on solid fossil fuel of greater than or equal to 250 million Btu per hour, may not emit from any stack more than 3.2 pounds of sulfur dioxide per million Btu heat input.”
11. At NR 417.07(3), the Wisconsin SIP provides sulfur dioxide emission limits for new sources, and states “no person may cause, allow or permit sulfur dioxide to be emitted to the ambient air from any direct source constructed after February 1, 1985 in amounts greater than those specified in this subsection.”
12. At NR 417.07(3)(a), the Wisconsin SIP provides any steam generating unit or other fuel burning equipment firing solid fossil fuel may not emit from any stack more than 3.2 pounds of sulfur dioxide per million Btu heat input.
13. At NR 417.07(4), the Wisconsin SIP provides for more restrictive emission limits, and provides that “the department may require a source to meet a more restrictive emission limitation than an applicable emission limitation provided under subsection (2) or (3) if the department determines that a more restrictive emission limitation is required to ensure that the source will not cause or exacerbate a violation of an ambient air quality standard or air increment for sulfur dioxide.”

14. At NR 417.07(5), the Wisconsin SIP provides that WDNR may grant an alternate emission limitation to a source which is subject to an emission limitation in NR 417.07(2) if the following conditions are met:
- a. The owner or operator of the source submits a written request for an alternate emission limitation which outlines the specific conditions or special circumstances which prevent the source from complying with the applicable emission limitation in NR 417.07(2) and which contains a proposed alternate emission limitation for the source. NR 417.07(5)(a).
 - b. The owner or operator of the source demonstrates that the proposed alternate emission limitation will not delay attainment or prevent maintenance of an ambient air quality standard for sulfur dioxide, as demonstrated by air quality modeling acceptable to the department. NR 417.07(5)(b).
 - c. If the source is subject to the emission limitation in sub. (2) (a) or (c), the proposed alternate emission limitation may not exceed 5.5 pounds of sulfur dioxide per million Btu heat input for any fuel burning equipment firing solid fossil fuel; or 3.0 pounds of sulfur dioxide per million Btu heat input for any fuel burning equipment firing residual fuel oil. The alternate emission limitation of 5.5 pounds of sulfur dioxide per million Btu heat input for solid fossil fuel burning equipment may be calculated on a 30-day rolling average for a source, if there is one or more other sulfur dioxide emission limitations applicable to the source which would assure the attainment and maintenance of the ambient air quality standards for sulfur dioxide. NR 417.07(5)(c).
 - d. The owner or operator of the source demonstrates that there is a substantial cost difference between the costs required for the source's compliance with the applicable emission limitation in sub. (2) and the costs required for the source's compliance with the proposed alternate emission limitation. NR 417.07(5)(e).
 - e. The owner or operator of the source demonstrates that the ambient air quality impact of the emissions from the source while emitting at the proposed alternate emission limitation, when added to the background concentration of sulfur dioxide in the vicinity of the source, does not exceed 75% of the ambient air quality standards for sulfur dioxide. In calculating the 75% figure, sulfur dioxide emissions from sources which are regulated under NR 440 may not be considered. NR 417.07(5)(f).
 - f. The projected annual emissions of sulfur dioxide from the source, resulting from the proposed alternate emission limitation, will not exceed the annual sulfur dioxide emissions from the source in calendar years 1979 to 1983, either in terms of the highest total tons of sulfur dioxide per calendar year or in terms of the highest annual average emission rate, as expressed in pounds of sulfur dioxide per million Btu for steam generating units or fuel burning equipment or in pounds of sulfur dioxide per ton of air dried unbleached pulp for process sources at a kraft mill or sulfite mill. This condition does not apply to a source which is authorized

by statute to increase its annual emissions of sulfur dioxide, to fuel burning equipment which had the capability of firing residual fuel oil but which derived more than 50% of its annual heat input from natural gas for each calendar year from 1979 to 1983, or to fuel burning equipment which had the capability of firing coal but which derived more than 50% of its annual heat input from wood or wood waste for each calendar year from 1979 to 1983. NR 417.07(5)(g).

- g. The owner or operator of the source submits an application for and receives an elective operation permit or a modification to an operation permit for the source. NR 417.07(5)(h).

- 15. On May 21, 1993, EPA approved Air Pollution Control Permit (86-SJK-072), dated and effective July 28, 1987, issued by the Wisconsin Department of Natural Resources to the Thilmany Pulp and Paper Company, limiting the emissions and operation of Boilers #07, 08, 09, 10, and 11 at the facility in Kaukauna, Outagamie County, Wisconsin, as part of Wisconsin SIP. *See 58 Fed. Reg. 29545.*

Title V Requirements

- 16. Title V of the Act, 42 U.S.C. §§ 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1) requires each state to develop and submit to EPA an operating permit program which meets the requirements of Title V. Pursuant to Appendix A of 40 C.F.R. Part 70, on December 4, 2001, EPA granted Wisconsin final approval of its Title V Clean Air Act Permit Program, effective November 30, 2001. *66 Fed. Reg. 62951.*
- 17. The regulation at 40 C.F.R. § 70.2 defines “major source” as, among other things, any stationary source that directly emits, or has the potential to emit, 100 tons per year of more of any air pollutant subject to regulation.
- 18. Wisconsin’s Title V operating permit program regulations are codified at Wisconsin Administrative Code NR 407 and are federally enforceable pursuant to Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3).
- 19. The regulation at 40 C.F.R. § 70.6(b)(1) provides that all terms and conditions in a Title V permit are enforceable by EPA.
- 20. The regulation at 40 C.F.R. § 70.5(a) provides that “for each part 70 source, the owner or operator shall submit a timely and complete permit application in accordance with this section.”
- 21. The regulation at 40 C.F.R. § 70.5(b) provides that any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

22. The regulation at 40 C.F.R. § 70.5(d) requires that the permit application contain certification by a responsible official of truth, accuracy, and completeness of the application.

The Facility's Construction and Operation Permits

23. On July 28, 2005, Wisconsin submitted General and Registration construction permitting programs for EPA approval into the Wisconsin SIP. On January 18, 1995, EPA incorporated by reference certain parts of Wisconsin Administrative Code, NR 406 as part of the federally enforceable SIP for Wisconsin, effective September 1, 2005. *See* 40 C.F.R. § 52.2570(113)(i)(A) through (D). *See* 60 *Fed. Reg.* 3543.
24. On January 14, 1994, the State of Wisconsin submitted its rules for an Operating Permit program intended to satisfy federal requirements for issuing federally enforceable operating permits.
25. On July 28, 1987, WDNR issued to the Facility Air Pollution Control Permit 86-SJK-072 (1987 Air Pollution Control Permit) with alternate sulfur dioxide emission limits at Boilers #07, 08, 09, 10, and 11, under NR 417.07(5) of the Wisconsin Administrative Code.
26. On September 13, 1999, WDNR issued to the Facility Construction Permit 99-SDD-109 (1999 Construction Permit) with alternate sulfur dioxide limits at Boilers #09 and 11, under NR 417.07(5) of the Wisconsin Administrative Code.
27. The Facility applied for a revision to the 1999 Construction Permit and renewal of Operation Permit 445031180-P01 on May 9, 2003. On May 20, 2008, WDNR issued a revision to the 1999 Construction Permit, identified as 99-SDD-109-R1 (Revision to 1999 Construction Permit), and Operation Permit 445031180-P10 (2008 Operation Permit).
28. On February 11, 2020, WDNR issued to the Facility Permit No. 445031180-P22 (2020 Operation Permit), which incorporated the alternate sulfur dioxide emission limits at Boilers #07, 08, 09, 10, and 11 from the 1987 Air Pollution Control Permit and the 1999 Construction Permit.
29. Condition A.3.a of the 2020 Operation Permit limits sulfur dioxide emissions from “Boiler B07” to 92.7 pounds per hour averaged over any consecutive 24 hours.
30. Condition B.3.a.(2) of the 2020 Operation Permit provides that combined sulfur dioxide emissions from “Boiler B09” and “Boiler B11” shall not exceed 3865.4 pounds per hour averaged over any 24-hour period.
31. Condition D.3.a.(1) of the 2020 Operation Permit provides that combined sulfur dioxide emissions from recovery boiler “B08” and recovery boiler “B10” shall not exceed 466.3 pounds per hour average over any consecutive 24-hour period.

Relevant Factual Background

32. Ahlstrom owns and operates five boilers at the Facility, identified as Boilers #07, 08, 09, 10, and 11.
33. Boilers #07, 08, 09, 10, and 11 emit sulfur dioxide.
34. The Facility is subject to the conditions for receiving alternate emission limits for sulfur dioxide at Boilers #07, 08, 09, 10, and 11 in the Wisconsin SIP at NR 417.07(5).
35. As part of the application process for the Revision to the 1999 Construction Permit and 2008 Operation Permit, on July 14, 2006, the Facility submitted information necessary to conduct an ambient air modeling analysis of the Facility's sulfur dioxide emissions (2006 Modeling Analysis).
36. WDNR included the results of the 2006 Modeling Analysis in the Preliminary Determination document for the Revision to the 1999 Construction Permit and 2008 Operation Permit application. The Preliminary Determination document provides WDNR's review of the source's permit application materials.
37. The 2006 Modeling Analysis considers the impact of emissions from the Facility on ambient sulfur dioxide concentrations in Outagamie County. The sulfur dioxide emissions from Boilers #07, 08, 09, 10, and 11 made up 99.8 percent of the total sulfur dioxide emissions used as inputs for the 2006 Modeling Analysis. The emission rates are equal to the alternate emission limits established in Paragraphs 29, 30, and 31 above.
38. The 2006 Modeling Analysis demonstrates the Facility's impact on ambient sulfur dioxide concentration is $505.6 \mu\text{g}/\text{m}^3$ as a 3-hour average, not including the background sulfur dioxide concentration (established for Brown County but also representative of Outagamie County). The contribution of sulfur dioxide concentration from the Facility combined with the background concentration is $633.9 \mu\text{g}/\text{m}^3$ as a 3-hour average.
39. The 2006 Modeling Analysis demonstrates that the emissions from the Facility while emitting at the alternate emission limits established in Paragraphs 29, 30, and 31, when added to the background concentration of sulfur dioxide in the vicinity of the source, exceeds 75 percent of the ambient air quality standards for sulfur dioxide promulgated in 2010. Thus, as of 2010, the Facility no longer met the conditions required to use alternate emission limits.
40. In its permit application on November 13, 2018, Ahlstrom certified, as described in the application for Permit No. 445031180-P22, that the Facility was fully in compliance with all applicable requirements. The alternate emission limits were applicable requirements under the Permit.
41. On December 31, 2019, Ahlstrom completed three years of ambient sulfur dioxide monitoring at the Facility (Ambient Sulfur Dioxide Monitoring), resulting in an ambient sulfur dioxide concentration of 77 ppb based on a 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour concentrations. The Ambient Sulfur

Dioxide Monitoring demonstrates that the contribution from the Facility exceeds the ambient sulfur dioxide standard set forth in Paragraph 3.

42. At the Facility, Ahlstrom is subject to the sulfur dioxide emission limits in the Wisconsin SIP at NR 417.07(2) and (3).
43. Boilers #09 and 11 were constructed before February 1, 1985, and modified after February 1, 1985. Boiler #09 has a capacity of 192.4 million Btu per hour, and Boiler #11 has a capacity of 379 million Btu per hour. Boilers #09 and 11 exhaust at Stack S09.
44. On June 14, 2018 and June 19, 2019, EPA issued Clean Air Act Section 114 information requests to the Facility. On September 9, 2019, Ahlstrom submitted information to EPA responsive to EPA's June 19, 2019 information request (2019 Response).
45. The 2019 Response included data demonstrating that, at various periods from 2015 through 2018, the Facility emitted sulfur dioxide at rates greater than of 3.2 pounds per million Btu from Boilers #09 and 11 and Stack S09.

Violations

46. Based on, among other things, the 2006 Modeling Analysis and the results available from the Ambient Sulfur Dioxide Monitoring as of December 31, 2019, Ahlstrom has failed to meet the conditions under which it may be granted alternate emission limits for sulfur dioxide at Boilers #07, 08, 09, 10, and 11, in violation of the Wisconsin SIP at NR 417.07(5).
47. At various times from 2015 through 2018, the Facility has failed to limit sulfur dioxide emissions from Stack S09 and Boilers #09 and 11 to less than 3.2 million Btu, in violation of the Wisconsin SIP at 417.07(2)(a).
48. Based on incomplete information in the permit application submitted on November 13, 2018, Ahlstrom is in violation of 40 C.F.R. § 70.5(a).
49. Based on failure to provide information regarding the Ambient Sulfur Dioxide Monitoring, Ahlstrom has failed to promptly submit corrected and accurate information, relating to the Permit and the permit application submitted on November 13, 2018, in violation of 40 C.F.R. § 70.5(b).

Environmental Impact of Violations

- 50. These violations have caused excess emissions of sulfur dioxide.
- 51. Current scientific evidence links short-term exposures to sulfur dioxide ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms.

Date

Michael D. Harris
Division Director
Enforcement and Compliance Assurance
Division